

6.5 *Household Hazardous Waste*

6.5.1 Background

This section is applicable to the Environmental Services Department (ESD). ESD oversees and runs the Household Hazardous Waste (HHW) Program. The HHW Program description contains the measures taken to actively eliminate illicit discharges associated with the improper use and disposal of household hazardous materials. These include products used in the routine maintenance of a resident's home, yard, and/or vehicle. The HHW Program has been in operation since 1985 and has provided opportunities for the safe disposal of HHW through one-day collection events, a permanent facility, educational programs, and public/private partnership collection activities. The HHW Program serves to divert HHW from the City's municipal solid waste landfill, the sewer system, and the ground and storm drain system, since inappropriate disposal may adversely affect the quality of our receiving waters and ground water supplies. Thus, the program itself is a best management practice (BMP) and this environmental message is included in outreach materials when appropriate.

Beginning in fiscal year 2007, the fiscal responsibility for the diversion of HHW is equally shared by the Environmental Services Department (for diversion from the landfill), General Services Storm Water Pollution Prevention Division (for diversion from the ground and storm water), and Metropolitan Wastewater Department Environmental Monitoring and Technical Services (for diversion from the sewer system). A Service Level Agreement (SLA) was established, and it identified ESD as the service provider and defined the scope of work, responsibilities, and billing process.

Both the City and the private sector provide collection services for HHW. In 1999, a permanent household hazardous waste transfer facility (HHW transfer facility) was opened at the Miramar Landfill and now serves residents with weekly HHW disposal services. Additionally, to target "do-it-yourself mechanics", the City operates one-day collection events throughout the City that accept used motor oil, contaminated motor oil, oil filters, antifreeze, and vehicle batteries. These events are promoted as auto product recycling events. Also, the private sector voluntarily collects recyclable auto products from the public.

Recent legislation, SB20/SB50, established a payment system to support the collection and recycling of cathode ray tubes (CRTs) including computer monitors, television, and DVD players. Many private retailers provide collection of these items and other electronic devices. AB 2901, California's Cell Phone Recycling Act of 2004, AB 1125, the Rechargeable Battery Recycling Act, require retailers to offer no charge cell phone and rechargeable battery recycling options.

The City's program must meet the requirements of the Municipal Storm Water Permit (Order No. R9-2007-001, "Municipal Permit," see Appendix I), as described in Table 6.5-1.

Table 6.5-1. Municipal Permit Requirements for Household Hazardous Waste.

URMP Section	Municipal Permit Section	Requirement (Summary)
6.5.2	(Pg. 32) D. 3. a. (1)	Inventory municipal areas, activities and potential sources of pollutants.
6.5.3	(Pg. 32-34) D. 3. a. (2,3,4,5); (Pg. 41) D.3.c.(2) (c)	Implement and maintain BMPs.
6.5.4	(Pg. 35) D. 3. a. (7)	Inspect municipal areas, activities and implement any necessary follow up actions.
6.5.4.2	(Pg B-6) Attachment B. 5. (e)	Report pollutant discharges to the storm drain system or receiving waters.
6.5.4.3	(Pg. 45) D. 5.b.(1)(d)	Implement and designate an educational program for all City personnel, and public .
6.5.4.4 and Appendix XIII "Annual Report Form Questions"	(Pg. 67) J. 3. (c, g, j); (Pg. 51) G. 3	Track and submit data for Annual Report Forms, track and report anticipated and actual fiscal year budget expenditures.

6.5.2 Source Characterization

The City of San Diego operates one HHW facility located at 5161 Convoy Street, San Diego. HHW activities, their associated potential pollutants, and designated BMPs are listed in Table 6.5-2. This facility is included in the Municipal Facilities inventory in Appendix III. ESD will update any changes to the inventory, activities, and/or BMPs on an annual basis as part of the reporting process described in Section 6.5.4.4, "Annual Report Forms."

6.5.3 Best Management Practice Requirements

6.5.3.1 Updated BMP Requirements

The BMPs identified in Sections 6.5.3.1 to 6.5.3.2 below are the BMPs required for the HHW Transfer Facility and one-day collection events. The minimum and activity-specific BMPs identified in this section are documented and implemented by ESD policy or procedural manuals.

As the BMPs are improved or revised, ESD will provide updated documentation to the Storm Water Pollution Prevention Division with their annual report form. Updates will also be provided if it is determined that a municipal activity results in a discharge in violation of Section 43.03 of the Stormwater Management and Discharge Control Ordinance ("Stormwater Ordinance"). It is important to note that collectively, these BMPs represent the Maximum Extent Practicable (MEP) Standard required by the Municipal Permit. Therefore, if any BMPs are eliminated or modified, the replacement

set of BMPs must collectively provide equal or greater storm water quality protection. For information on enforcement see Section 9.5 in “Illicit Discharge Detection and Elimination.”

6.5.3.1.1 Minimum BMPs

ESD will ensure that all City staff implement the following minimum BMPs, as applicable.

1. Prior to starting activities, locate storm drain system and prevent pollutants from entering. Activity-specific BMPs are listed in Table 6.5-2.
2. Only clean rainwater can be discharged to the storm drain system. See Storm Water Ordinance Section 43.0305 “Exemptions from Discharge Prohibition” for allowable discharges.¹
3. Sweep up municipal areas after activities and/or spills. Hosing down pollutants into the storm drain system is prohibited by Storm Water Ordinance Section 43.03. Use a broom, shovel, or other mechanical means to collect solids for reuse or disposal. Use absorbents to reduce the spread of liquids and absorb or pump up liquids for reuse or disposal. Dispose of hazardous waste as required by law or contact the Environmental Services Department, Hazardous Materials Management Program (ESD-HMMP) for assistance.
4. Annually inspect and clear all storm drain system catch basins and drop inlets of debris or other foreign material at locations listed in the municipal facility inventory (see Appendix III) according the “Storm Drain Inspection/Cleaning Schedule” in Table 6.3-2, “Buildings/Parking/Landscaping.” Annually inspect and clear open channels in a timely manner.
5. Keep lids closed on trash cans and dumpsters to prevent rainwater from entering, as applicable, and ensure that trash is picked up around the cans and dumpsters at all times. Provide enough trash cans/dumpsters in all appropriate areas.
6. Keep materials and waste piles covered and, if possible, off the ground. Materials and waste stockpiles must be protected to prevent contact with rainwater and any runoff. Check materials and stockpiles on a regular basis to verify the BMPs (such as roof covering, tarps, silt fences, palettes, etc.) are in good condition.
7. Routinely inspect vehicles for leaks, and service immediately if necessary. If vehicle is leaking, until vehicle is repaired use drip pans for all vehicle leaks and/or clean up with dry methods and dispose of as a regulated waste. Contact ESD-HMMP for assistance.
8. Capture and properly dispose of all power washing water. See fact sheet at <http://www.sandiego.gov/thinkblue/pdf/mobilebusinessbrochure.pdf> for proper power washing methods and disposal requirements.
9. Stencil storm drains in the Division’s municipal inventory (Appendix III) with “No Dumping—Goes to Ocean/No Tire nada—Llega al Mar/Think Blue”, as appropriate. Check stencil legibility, and if necessary, re-stencil before September 30 of each

¹ http://clerkdoc.sannet.gov/RightSite/getcontent/local.pdf?DMW_OBJECTID=09001451800870fc

year. Stencils and asphalt paint (blue on sidewalks/white on asphalt) are available from the Storm Water Pollution Prevention Division.

10. Eliminate over-irrigation as a means of minimizing the volume of potentially contaminated water entering the storm drain system.

It is ultimately the ESD's responsibility to prevent pollutant discharges to the storm drain system. Therefore, ESD will identify and implement any combination of the above minimum BMPs and/or any additional BMPs to avoid discharging pollutants into the storm drain system.

ESD will coordinate with the Purchasing and Contracting Department to ensure that as operations and maintenance contracts are initiated or renewed, references to the Storm Water Ordinance and the most current minimum BMP requirements are written into the contract (see Appendix IX, "Municipal Operations and Maintenance Contract Language" for current language as of January 25, 2008).

6.5.3.1.2 Activity-Specific BMPs

In addition to the minimum BMPs listed above, the following BMPs listed in Table 6.5-2 shall be implemented at the HHW facility.

Table 6.5-2. BMPs Designated for Areas and Activities at Household Hazardous Waste Facilities.

Activity	Potential Pollutants	Best Management Practices								
Storm Drain System Inspection and Cleaning	sediment, metals, organic compounds, oil and grease, pesticides	<ul style="list-style-type: none">• Close storm drain valve in collection area during hours of operations.• Inspect and clean all storm drain facilities (catch basins, storm drain inlets, open channels, etc.) of debris or other foreign material according to the schedule below. When practical, work is to be done when conditions are dry. Dispose of materials properly.								
		Storm Drain Inspection/Cleaning Schedule								
		<table><tr><th>Debris Volume</th><th>Frequency*</th></tr><tr><td>1. High (e.g., tends to clog during rains)</td><td>Annually, between May 1 and September 30.**</td></tr><tr><td>2. Medium (e.g., tends to collect measurable debris without clogging)</td><td>Annually at any time during the year.**</td></tr><tr><td>3. Low (e.g., generally free of debris)</td><td>Annually at any time during the year for Fiscal Year 2008 and 2009. Every other year thereafter.</td></tr></table>	Debris Volume	Frequency*	1. High (e.g., tends to clog during rains)	Annually, between May 1 and September 30.**	2. Medium (e.g., tends to collect measurable debris without clogging)	Annually at any time during the year.**	3. Low (e.g., generally free of debris)	Annually at any time during the year for Fiscal Year 2008 and 2009. Every other year thereafter.
		Debris Volume	Frequency*							
		1. High (e.g., tends to clog during rains)	Annually, between May 1 and September 30.**							
2. Medium (e.g., tends to collect measurable debris without clogging)	Annually at any time during the year.**									
3. Low (e.g., generally free of debris)	Annually at any time during the year for Fiscal Year 2008 and 2009. Every other year thereafter.									

Activity	Potential Pollutants	Best Management Practices
		<p>* Any storm drain facility that is designed to be self-cleaning must be cleaned of any accumulated debris observed during an inspection immediately. Anthropogenic litter observed in open channels must be cleaned in a timely manner after obtaining all appropriate environmental clearances.</p> <p>** Following two fiscal years of inspections, any storm drain facility that does not contain debris may be re-classified as a "Low" priority facility and may be inspected as needed, but not less than every other year.</p>
Unloading, Packaging and Sorting Areas	metals, organic compounds, oil and grease, pesticides	<ul style="list-style-type: none"> • Cover areas with a permanent canopy.
Hazardous Waste Unloading from Vehicle	metals, organic compounds, oil and grease, pesticides	<ul style="list-style-type: none"> • Place wastes on a cart and wheel to sorting area. • Line sorting area with visqueen. • Package wastes in sorting area.
Hazardous Waste Storage Area	metals, organic compounds, oil and grease, pesticides	<ul style="list-style-type: none"> • Store all wastes inside chemical storage lockers equipped with fire suppression systems and secondary containment. • Store all wastes outside in secondary containment, on pallets and covered.
Hazardous Materials Storage Area	metals, organic compounds, oil and grease, pesticides	<ul style="list-style-type: none"> • Store materials in a Connex box or cover.
One-day Collection Events	metals, organic compounds, oil and grease, pesticides	<ul style="list-style-type: none"> • Locate storm drains and cover with visqueen to prevent pollutants from entering. • Stage absorbent materials near storm drain if needed to address spills. • Cover packaging and sorting area with tent/canopy during inclement weather. • Line sorting area with visqueen. • Package wastes in sorting area. • Store hazardous waste in containers on a wood pallet until loaded on truck for shipment. • Inspect parking lot at end of event and remove visqueen from storm drains and pick-up any litter.
Refuse Dumpsters		<ul style="list-style-type: none"> • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping"
Landscaping		<ul style="list-style-type: none"> • See this activity's BMP in Table 6.3-2, Section 6.3, "Buildings/Parking/Landscaping"

6.5.3.2 Additional Controls for Municipal Areas and Activates

The Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection as described in detail in Section 6.5.4.1 “Facilities Inspections and Improvements.”

6.5.4 Program Implementation

The previous sections described the minimum and activity-specific BMPs that must be implemented. This section describes the administrative steps that departments will undertake to prepare for and verify the implementation of those BMPs including facility inspections, discharge notifications, education and training, and annual reporting. In addition, departments will maintain a storm water representative responsible for overseeing the departments implementation efforts. The Storm Water Pollution Prevention Division will meet periodically with each department's storm water representative to assist with the implementation efforts.

6.5.4.1 Facility Inspections and Improvements

This section applies to ESD which maintains the household hazardous waste transfer facility. The Municipal Permit requires that the City inspect all municipal facilities annually. The purpose of the facility inspections is to evaluate the adequacy of existing BMPs, modify and improve BMPs where necessary and identify any potential pollutant discharges (*Note*: see Section 6.5.4.2, “Pollutant Discharge Notification” below for reporting requirements).

In addition, the Municipal Permit requires that the City implement additional BMPs at municipal facilities that discharge to, or are tributary to, a 303(d) listed water body, lagoon, or water body on environmentally sensitive lands (all City facilities are subject to this requirement). To meet this additional BMP requirement, each City facility will conduct a second facility inspection. As shown in Table 6.5-3, the first inspection will occur before the beginning of the rainy season (during September) and the second inspection will occur during the rainy season (preferably during January, but prior to April).

Table 6.5-3 Municipal Facility Inspection Requirements.

Inspection	Timeframe
First	September
Second	January – April

If as a result of the inspection ESD determines that improvements to their BMPs are required, ESD will perform the action (e.g., repair a structural BMP), and subsequently conduct a follow-up inspection of the BMPs to verify that the original issues have been resolved. Note: if repairs, modifications or improvements to the BMPs are necessary, those follow-up actions and re-inspections will not count as the second annual inspection. If ESD determines that the modifications require additional time or funds to implement, ESD will develop an anticipated schedule for when the modification will be completed. Record of any changes/improvements instituted as part of the municipal facility inspection process will be included in the annual report forms provided to the Storm Water Pollution Prevention Division each year.

The Municipal Facility Inspection Forms are attached as Appendix XIV, "Inspection Forms" and are also located on the City's website.²

6.5.4.2 Pollutant Discharge Notification

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the San Diego Regional Water Quality Control Board (Regional Board). A significant threat to water quality or human health is determined on a case-by-case basis by ESD and depends on the type of pollutant, the degree of the violation (i.e., the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Generally, for a discharge to be considered a significant threat to water quality or human health, the discharge must contain a non-storm water substance and enter the storm drain system. See Storm Water Ordinance Section 43.0305 "Exemptions from Discharge Prohibition" to review the list of allowable non-storm water discharges (Appendix II). Please be aware that the 24-Hour reporting process is designed to address significant discharges as a result of significant accidents, not day-to-day operations or activities, or even minor accidents. A small water line break, for example, that occurs in a natural area but causes little or no environmental damage, would generally not be considered a significant event that would require reporting through the 24-Hour reporting process. In another example, a fuel spill that is contained and removed from a paved parking lot, without any of the substance entering the storm drain system or receiving waters, would not be considered a significant reportable discharge.

When ESD determines that a discharge poses a significant threat to water quality or human health, ESD must notify the Regional Board by facsimile within 24 hours of the discharge event using the Chemical Release Reporting Form 304 available in Appendix XV and also on the City's website at <http://www.sandiego.gov/thinkblue/resources/index.shtml>. A copy of the form must also be forwarded to the City's Storm Water Pollution Prevention Division for record keeping purposes. Additionally, a more detailed written report of the event and follow up actions

² <http://www.sandiego.gov/thinkblue/resources/index.shtml>

must be sent by the ESD to the Regional Board within five working days of the day the event was identified.

ESD will also notify other regulatory agencies as required on Form 304.

6.5.4.3 Education and Training

The Municipal Permit identifies five target communities to receive education using all media as appropriate:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The Municipal Permit requires that the goals of education and outreach activities to targeted communities be two-fold:

1. To measurably increase the knowledge base and;
2. To measurably change the behavior(s) of the target audiences with regards to storm water pollutants found in the storm drain system.

For more comprehensive information on the roles of the Storm Water Pollution Division and other City Departments see Table 10-2 in Section 10.0, "Education."

6.5.4.3.1 General Storm Water Training

This section describes City-wide trainings provided by the Storm Water Pollution Prevention Division.

New Employees

The Storm Water Pollution Prevention Division is responsible for developing and providing all new employee trainings. All new staff will receive a basic introduction to storm water issues via a "Storm Water and You" training module presented at the "New Employee Orientation" workshop. Staff that do not take the "New Employee Orientation" workshop (e.g. seasonal, part-time, etc.) will receive general storm water training as part of their employee orientation within their department.

Existing Employees

Existing employees with regular access to a computer will be mandated to receive "refresher" training in storm water pollution prevention every two years via a City-wide training element developed by the Storm Water Pollution Prevention Division.

Additionally, knowledge assessment via “e-tests” for randomly selected City employees with regular computer access will occur periodically between the mandated “refresher” courses. Finally, the Storm Water Pollution Prevention Division will develop a computer-based training (CBT) module addressing common activities shared by multiple field crews throughout the City.

6.5.4.3.2 Activity-Specific Training

Municipal Departments

This section describes activity-specific trainings provided by ESD. ESD will create, execute and fund activity-specific training sessions that incorporate the minimum storm water BMPs in Table 6.5-3. The Storm Water Pollution Prevention Division can assist departments with the development of training materials at their request.

Table 6.5-3. Activity-specific BMP Training(s) Provided by HHW Program.

Training Module/Item	Staff Level (i.e., Supervisor, Crew, etc.)	Schedule
Proper BMPs for Collecting, Packaging, and Storing HHW	Contractor Staff City Field Crew Employees if applicable	Ongoing Tailgate safety briefing conducted before operations at HHW transfer facility and one-day events.

Note: the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.

6.5.4.3.3 Department Education and Outreach to the Public

This section identifies the various public education and outreach activities to be performed by ESD in consultation with the Storm Water Pollution Prevention Division (e.g., including the Think Blue logo on materials). Table 6.5-5 lists the activities, specific targeted communities, and the anticipated completion dates.

Table 6.5-5. Department External Outreach Activities by Target Audience.

Dept Division Activity	Target Audience(s) 1. Construction Site Owners and Developers 2. Industrial Owners and Operators 3. Commercial Owners and Operators 4. Residential Community, General Public, and School Children 5. Under-represented audiences in 1-4	
1. HHW Transfer Facility Brochure	4	Ongoing
2. Auto Product Recycling Event Flyer	4	Ongoing
3. Auto Product Recycling Event Water Bill Insert	4 - 5 - Other – City Water Bill Customer List	1 – 2 times annually
4. Auto Product Recycling Event Pennysaver Inserts	4 - 5 – Other – Selected zip codes all mailing addresses in zip code	Each Event (7-8 per year)
5. Auto Product Recycling Event San Diego Union-Tribune Inserts	4 - 5 – Other – Selected zip codes - all subscribers in zip code	Each Event (7-8 per year)
6. Auto Product Recycling Event Ads	4 – 5	1-5 ads per

Dept Division Activity	Target Audience(s) 1. Construction Site Owners and Developers 2. Industrial Owners and Operators 3. Commercial Owners and Operators 4. Residential Community, General Public, and School Children 5. Under-represented audiences in 1-4	
		each event
7. Direct Mail of HHW transfer facility brochure and Auto Product Recycling Event schedule.	4 – ESD mailing list for selected City residential trash customers.	Based on funding and need.
8. Customer Service Hotline	1-4	Ongoing
9. Certified Oil Collection Center Inspections	3	Annually
10. ESD web page	1-4	Update as needed

6.5.4.4 Annual Report Forms

The Municipal Permit requires the City to report on their storm water activities by September 30 each year beginning in September 2008. Also, each fiscal year a budget is developed and maintained by Environmental Services Department to track expenditures for designing, developing, and implementing BMPs and educational activities. The Environmental Services Department annual report information will be submitted to the Storm Water Pollution Prevention Division on or before July 21 each year. See Appendix XIII, “Annual Report Form Questions” for department-specific reporting requirements.